AMENDMENTS TO THE CLAIMS

Claim 1. (Currently amended) A method of producing lactic acid, comprising:

aerobically culturing in a first culture minimal medium an acid-tolerant (AT) yeast strain that produces essentially no ethanol ~~when cultured in a culture medium~~,

wherein the AT yeast strain comprises a genome that comprises an exogenous lactate dehydrogenase gene that is capable of being expressed in the AT yeast strain,

wherein a protein resulting from the expression of the exogenous lactate dehydrogenase gene has lactate dehydrogenase activity,

wherein the AT yeast strain is capable of growing in a minimal medium at a lower pH than a parent yeast strain.

Claim 2. (Original) The method of claim 1, wherein the AT yeast strain is C_2 carbon source independent and is capable of producing lactic acid at a pH of less than about 3.5.

Claim 3. (Original) The method of claim 1, wherein the AT yeast strain is C_2 carbon source independent and is capable of producing lactic acid at a pH of less than about 2.8.

Claim 4. (Original) The method of claim 1, wherein the AT yeast strain is C_2 carbon source independent and is capable of producing lactic acid at a pH of less than about 2.3.

Claim 5. (Original) The method of claim 1, wherein the AT yeast strain is capable of producing greater than about 50 grams lactic acid/100 grams glucose when cultured in the minimal medium comprising glucose as a sole carbon source.

Claim 6. (Original) The method of claim 1, wherein the AT yeast strain is capable of producing between about 50 and 85 grams lactic acid/100 grams glucose when cultured in the minimal medium comprising glucose as a sole carbon source.

Claim 7. (Original) The method of claim 1, wherein the AT yeast strain is capable of producing between about 70 and 85 grams lactic acid/100 grams glucose when cultured in the minimal medium comprising glucose as a sole carbon source.

Claim 8. (Currently amended) The method of claim 1, wherein a culture broth resulting from the culturing of the AT yeast strain comprises less ppm of at least one of glycerol, erythritol, malic acid, pyruvic acid, succinic acid, formic acid, and fumaric acid than a culture broth resulting from the culturing of the parent strain in ~~essentially~~ the same minimal medium under ~~essentially~~ the same culture conditions.

Claim 9. (Original) The method of claim 1, wherein the AT yeast strain belongs to a genus selected from the group consisting of *Saccharomyces, Candida, Schizosaccharomyces,* and *Kluyveromyces.*

Claim 10. (Original) The method of claim 1, wherein the AT yeast strain is a *Saccharomyces cerevisiae.*

Claim 11. (Original) The method of claim 1, wherein the AT yeast strain is a *Saccharomyces cerevisiae* that has a genotype pdc1(-6, -2)::loxP pdc5(-6,-2)::loxP pdc6(-6,-2)::loxP ura3-52 YEpLpLDH.

Claim 12. (Original) The method of claim 1, wherein the culturing is performed in an aerobic batch culture, in an aerobic fed-batch culture, or in an aerobic chemostat.

Claim 13. (Original) The method of claim 1, wherein the AT yeast strain is C_2 carbon source-independent.

Claim 14. (Original) The method of claim 13, wherein the first culture medium is a minimal medium comprising at least one defined carbon source selected from the group consisting of glucose, sucrose, fructose, maltose, lactose, and galactose.

Claim 15. (Original) The method of claim 14, wherein glucose is the sole carbon source.

Claim 16. (Original) The method of claim 1, wherein the AT yeast strain is C_2 carbon source-dependent and the first culture medium is a minimal medium comprising a carbon source consisting essentially of glucose and at least one C_2 carbon source.

Claim 17. (Original) The method of claim 1, wherein the first culture medium consists essentially of at least one defined carbon source, at least one nitrogen source, monopotassium phosphate, magnesium sulfate, copper sulfate, ferric chloride, manganese sulfate, sodium molybdate, zinc sulphate, biotin, inositol, thiamine, and water, wherein the nitrogen source is selected from the group consisting of urea, ammonium sulfate, ammonium phosphate, and ammonium nitrate.

Claim 18. (Original) The method of claim 1, wherein a chromosome of the AT yeast strain comprises the exogenous lactate dehydrogenase gene.

Claim 19. (Original) The method of claim 1, wherein at least one plasmid comprising the exogenous lactate dehydrogenase gene is present in the AT yeast strain.

Claim 20. (Original) The method of claim 1, wherein the exogenous lactate dehydrogenase gene is a *Lactobacillus plantarum*, bovine, *Lactobacillus casei*, *Bacillus megaterium*, *Rhizopus oryzae,* or *Bacillus stearothermophylus* lactate dehydrogenase gene.

Claim 21. (Original) The method of claim 1, wherein the exogenous lactate dehydrogenase gene is a *Lactobacillus plantarum* lactate dehydrogenase gene.

Claim 22. (Original) The method of claim 1, further comprising the step of recovering and purifying the lactic acid or a salt thereof.

Claim 23. (Original) The method of claim 22, wherein the purification step comprises at least one of distillation, ion exchange, nanofiltration or solvent extraction.

Claims 24-101. (Cancelled)

Claim 102. (Currently amended) A method of producing lactic acid, comprising:

aerobically culturing in a first culture minimal medium a recombinant yeast strain having a genome comprising an exogenous lactate dehydrogenase gene that is capable of being expressed in the recombinant yeast strain, wherein a protein resulting from the expression of the exogenous lactate dehydrogenase gene has lactate dehydrogenase activity, wherein the recombinant yeast strain is capable of producing at least about 50 grams lactic acid/100 grams glucose when grown in ~~a~~ the minimal medium comprising glucose as the sole carbon source, and wherein the recombinant yeast strain is capable of growing at a pH of less than about 3.5.

Claims 103-128. (Cancelled)